

Application Serial No. 09/877,341
Amendment dated April 9, 2003
Response to Office Action dated January 9, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Original): A process for forming a drag reducing agent slurry comprising:
2 forming a polyalphaolefin; and
3 mixing the polyalphaolefin with at least one alfol alcohol.

- 1 2. (Original): The process for forming a drag reducing agent slurry of claim 1, wherein the at least
2 one alfol alcohol is selected from the group consisting of 1-pentanol, 1-hexanol, 1-heptanol, n-octyl
3 alcohol, n-nonyl alcohol and 1-decanol.

- 1 3. (Original): A process for forming a drag reducing agent slurry comprising:
2 contacting alpha olefin monomer with a catalyst in a reactant mixture;
3 polymerizing the alpha olefin monomers, wherein during the polymerization, at least
4 a portion of the alpha olefin monomers polymerize in the reactant mixture to provide a
5 polyalphaolefin;
6 mixing the polyalphaolefin with at least one alfol alcohol.

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- 1 4. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the catalyst
2 is a transition metal catalyst.
- 1 5. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the
2 transition metal catalyst is a Ziegler-Natta catalyst.
- 1 6. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the Ziegler-
2 Natta catalyst is titanium trichloride.
- 1 7. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the reactant
2 mixture includes at least one co-catalyst.
- 1 8. (Original): The process for forming a drag reducing agent slurry of claim 7, wherein the at least
2 one co-catalyst is selected from the group consisting of alkylaluminoxanes, halohydrocarbons,
3 diethylaluminum chloride, and dibutylaluminum chloride.
- 1 9. (Currently Amended): The process for forming a drag reducing agent slurry of claim 3, wherein
2 the alpha olefin monomers ~~comprise homopolymers, terpolymers or copolymers~~ monomer includes
3 at least one of 1-hexene, 1-octene, 1-decene, 1-dodecene, or mixtures thereof.

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4 10. (Currently Amended): The process for forming a drag reducing agent slurry of claim 3, wherein
5 the alpha olefin ~~monomers comprise co-polymers of 1-hexene and 1-dodecene alpha olefins or co-~~
6 ~~polymers of 1-octene and 1-tetradodecene alpha olefins~~ monomer includes a combination of 1-
7 hexene and 1-dodecene alpha olefin monomers or a combination of 1-octene and 1-tetradodecene
8 alpha olefin monomers.

1 11. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the
2 polyalphaolefin is an ultra-high molecular weight polyalphaolefin having an inherent viscosity of at
3 least about 10 deciliters per gram and is amorphous with substantially no crystalline particles.

1 12. (Original): The process for forming a drag reducing agent slurry of claim 3, further comprising
2 the step of cryogrinding the polyalphaolefin prior to mixing the polyalphaolefin with at least one
3 alfol alcohol.

1 13. (Original): The process for forming a drag reducing agent slurry of claim 3, wherein the at least
2 one alfol alcohol is selected from the group consisting of 1-pentanol, 1-hexanol, 1-heptanol, n-octyl
3 alcohol, n-nonyl alcohol and 1-decanol.

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1 14. (Original): A drag reducing agent slurry comprising a polyalphaolefin and at least one alfol
2 alcohol.

1 15. (Currently Amended): The ~~process for forming a drag reducing agent slurry~~ drag reducing agent
2 slurry of claim 14, wherein the at least one alfol alcohol is selected from the group consisting of 1-
3 pentanol, 1-hexanol, 1-heptanol, n-octyl alcohol, n-nonyl alcohol and 1-decanol.

1 16. (Original): A drag reducing agent slurry comprising a polyalphaolefin and at least one alfol
2 alcohol formed by mixing the polyalphaolefin with at least one alfol alcohol.

1 17. (Currently Amended): The ~~process for forming a drag reducing agent slurry~~ drag reducing agent
2 slurry of claim 16, wherein the at least one alfol alcohol is selected from the group consisting of 1-
3 pentanol, 1-hexanol, 1-heptanol, n-octyl alcohol, n-nonyl alcohol and 1-decanol.

1 18. (Original): A drag reducing agent slurry comprising a polyalphaolefin and at least one alfol
2 alcohol formed by contacting alpha olefin monomers with a catalyst in a reactant mixture;
3 polymerizing the alpha olefin monomers, wherein during the polymerization, at least a
4 portion of the alpha olefin monomers polymerize in the reactant mixture to provide a
5 polyalphaolefin; and

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6 mixing the polyalphaolefin with at least one alfol alcohol.

1 19. (Original): The process for forming a drag reducing agent slurry of claim 18, wherein the at
2 least one alfol alcohol is selected from the group consisting of 1-pentanol, 1-hexanol, 1-heptanol,
3 n-octyl alcohol, n-nonyl alcohol and 1-decanol.

1 20. (Original): A process for reducing drag in a conduit, comprising:
2 forming a drag reducing agent slurry comprising a polyalphaolefin and at least one
3 alfol alcohol; and
4 introducing the drag reducing agent slurry into the conduit.

1 21. (Original): The process for forming a drag reducing agent slurry of claim 20, wherein the at
2 least one alfol alcohol is selected from the group consisting of 1-pentanol, 1-hexanol, 1-heptanol,
3 n-octyl alcohol, n-nonyl alcohol and 1-decanol.

1 22. (Original): A process for reducing drag in a conduit, comprising:
2 forming a drag reducing agent comprising a polyalphaolefin, wherein the drag
3 reducing agent is formed by contacting alpha olefin monomers with a catalyst
4 in a reactant mixture;

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5 polymerizing the alpha olefin monomers, wherein during the polymerization, at least
6 a portion of the alpha olefin monomers polymerize in the reactant mixture to
7 provide a polyalphaolefin;
8 mixing the polyalphaolefin with at least one alfol alcohol to form a drag reducing
9 agent slurry; and
10 introducing the drag reducing agent slurry into the conduit.

1 23. (Original): The process for forming a drag reducing agent slurry of claim 22, wherein the at
2 least one alfol alcohol is selected from the group consisting of 1-pentanol, 1-hexanol, 1-heptanol,
3 n-octyl alcohol, n-nonyl alcohol and 1-decanol.